



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0034; Directorate Identifier 2013-SW-006-AD]

RIN 2120-AA64

Airworthiness Directives; Eurocopter Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2012-10-53 for Eurocopter Deutschland GmbH (ECD) Model EC135P1, EC135P2, EC135P2+, EC135T1, EC135T2, and EC135T2+ helicopters. AD 2012-10-53 currently requires, before further flight and at specified intervals, checking and inspecting the upper and lower main rotor hub (MRH) shaft flanges for a crack, and inspecting the lower hub-shaft flange bolt attachment areas for a crack. Since we issued AD 2012-10-53, it has been determined that it is safe to increase the visual inspection intervals of the MRH shaft flanges from 10 hours time-in-service (TIS) to 50 hours TIS and remove the inspection of the lower MRH shaft flange bolt attachment areas. This proposed AD would continue to require checking and inspecting the upper and lower MRH shaft flanges for a crack. The proposed actions are intended to detect a crack on the MRH shaft flange, which if not corrected, could result in failure of the MRH and subsequent loss of control of the helicopter.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 days AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.

- Fax: 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Aviation Safety Agency (EASA) AD, the economic evaluation, any comments received and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at

<http://www.eurocopter.com/techpub>. You may review service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

On May 15, 2012, we issued Emergency AD (EAD) No. 2012-10-51 for ECD Model EC135 series helicopters to detect a crack on the MRH shaft flange. EAD No. 2012-10-51 required a pilot check of the lower MRH shaft flange for a crack or deformed blade attachment bolt safety pins before the first flight of each day, inspecting the upper and lower MRH shaft flanges for a crack within 5 hours TIS, and replacing the MRH shaft if there is a crack. EAD No. 2012-10-51 was prompted by AD No. 2012-0041-E, dated March 12, 2012, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for the ECD Model EC 135 series helicopters. EASA revised AD No. 2012-0041-E with EASA AD No. 2012-0041R1, dated March 15, 2012.

After we issued EAD No. 2012-10-51, EASA issued AD No. 2012-0085-E, dated May 17, 2012, which superseded EASA AD No. 2012-0041R1. EASA advised that since issuing EASA AD No. 2012-0041R1, further cracks had been detected on two other helicopters during the pre-flight checks. These are the same two cracks that prompted our EAD No. 2012-10-51. However, EASA also stated that identification of deformed safety pins may not be sufficient to detect a crack on the MRH shaft flange. ECD investigated the cause of the cracks and developed new inspection procedures with further corrective actions. Therefore, we issued EAD No. 2012-10-53 on May 18, 2012, which superseded EAD No. 2012-10-51. EAD No. 2012-10-53 was published in the Federal Register as a Final rule; request for comments on November 20, 2012, at 77 FR 69558.

In issuing AD No. 2012-10-53, we included additional part-numbered MRH shafts that should have been included in EAD No. 2012-10-51, changed the daily checks

to recurring checks at intervals not to exceed 6 hours TIS, added a 10 hour-TIS recurring inspection on MRH shafts with 400 or more hours TIS, and removed the check of the blade attachment bolt safety pins for deformation.

Actions Since AD 2012-10-53 Was Issued

Since we issued EAD No. 2012-10-53 on May 18, 2012, which was published as a Final Rule; Request for Comments on November 20, 2012 at 77 FR 69558, Eurocopter revised Alert Service Bulletin (ASB) No. EC135-62A-029, now at Revision 7, dated October 22, 2012. The inspection interval for the visual inspection of the MRH shaft flanges was increased to 50 flight hours based on results from full scale component testing. The note regarding the preflight check states that the time between two preflight checks must not exceed 6 flight hours, and clarifies that one flight may comprise of multiple take-offs and landings and a flight starts when the helicopter takes off and ends when the helicopter is on the ground with the engines shut off. Eurocopter also removed the visual inspection of the blade bolt attachment areas from the ASB.

EASA also revised its AD, now at EASA AD No. 2012-0085R5, dated October 30, 2012, to correct the unsafe condition. EASA advised that based on results of the further full scale component testing, it has been determined that the interval for the repetitive visual inspections of the upper and lower hub shaft flanges can be extended to 50 flight hours. EASA AD No. 2012-0085R5 also references ECD ASB No. EC135-62A-029, Revision 7, dated October 22, 2012, for related information. EASA considers AD No. 2012-0085R5 to be interim AD action and further AD action may follow.

FAA's Determination

These helicopters have been approved by the aviation authority of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with Germany, EASA, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type design.

Related Service Information

We reviewed Eurocopter ASB No. EC135-62A-029, Revision 7, dated October 22, 2012, which describes procedures for preflight checking the visible area of the upper and lower MRH shaft flanges and performing a repetitive visual inspection of the upper and lower MRH shaft for cracks. EASA classified this ASB as mandatory and issued AD No. 2012-0085R5 to ensure the continued airworthiness of these helicopters.

Proposed AD Requirements

This proposed AD would retain the repetitive visual check and inspection of the upper and lower MRH shaft flanges, as well as the replacement requirements of AD No. 2012-10-53 (77 FR 69558, November 20, 2012). An owner/operator (pilot) may perform the required visual check and must enter compliance with the applicable paragraph of the AD into the helicopter maintenance records in accordance with 14 CFR §§ 43.9(a)(1)-(4) and 91.417(a)(2)(v). A pilot may perform this check because it involves only looking at the visible area of the MRH shaft flanges and can be performed equally well by a pilot or a mechanic. That check is an exception to our standard maintenance

regulations. Further, this proposed AD would increase the repetitive visual inspection interval for MRH shafts with 400 hours or more TIS from 10 hours TIS to 50 hours TIS.

Any alternative method of compliance (AMOC) previously approved in accordance with AD No. 2012-10-53 (77 FR 69558, November 20, 2012), would continue to be considered approved as an AMOC for the corresponding requirements in this proposed AD.

Differences Between this Proposed AD and the EASA AD

EASA considers its AD action to be an interim action; we do not consider this proposed AD to be interim AD action because the proposed requirements for the applicable part-numbered MRH shafts are not expected to change. The EASA AD requires you to report the findings and send the removed MRH to ECD, while this proposed AD would not. The EASA AD requires the initial visual check within 3 days, while this proposed AD would require the initial visual check before further flight. The EASA AD does not specify affected MRH shaft part numbers; this proposed AD would because the FAA anticipates that ECD will produce new part-numbered MRH shafts without the same unsafe condition.

Costs of Compliance

We estimate that this proposed AD would affect 244 helicopters of U.S. Registry. We estimate inspecting the MRH shaft flanges would require 2.5 work-hours at an average labor rate of \$85 per work-hour, for a total cost per helicopter of \$212 and a total cost to U.S. operators of \$51,728 per inspection cycle. Replacing an MRH shaft would require about 8 work-hours at an average labor rate of \$85 per work-hour, and required parts would cost \$55,715, for a total cost per helicopter of \$56,395.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2012-10-53 (77 FR 69558, November 20, 2012), and adding the following new AD:

Eurocopter Deutschland GmbH (ECD): Docket No. FAA-2014-0034; Directorate Identifier 2013-SW-006-AD.

(a) Applicability

This AD applies to Model EC135P1, EC135P2, EC135P2+, EC135T1, EC135T2, and EC135T2+ helicopters, with a main rotor hub (MRH) shaft, part

number (P/N) L623M1006101, L623M1206101, L623M1006102, L623M1206102, L623M1006103, or L623M1206103 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in the MRH shaft flange, which could result in failure of the MRH and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD supersedes AD 2012-10-53, Amendment 39-17254 (77 FR 69558, November 20, 2012).

(d) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(f) Required Actions

(1) Before further flight, and thereafter at intervals not to exceed 6 hours time-in-service (TIS), check the MRH shaft lower flange and the visible area of the MRH shaft upper flange for a crack. Figures 1 and 2 to Paragraph (f)(1) of this AD are examples of cracks that have been discovered in the MRH shaft lower flange. The actions required by this paragraph may be performed by the owner/operator (pilot) holding at least a private pilot certificate, and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR §§ 43.9 (a)(1)-(4) and 14 CFR § 91.417(a)(2)(v). The record must be maintained as required by 14 CFR §§ 91.417, 121.380, or 135.439.

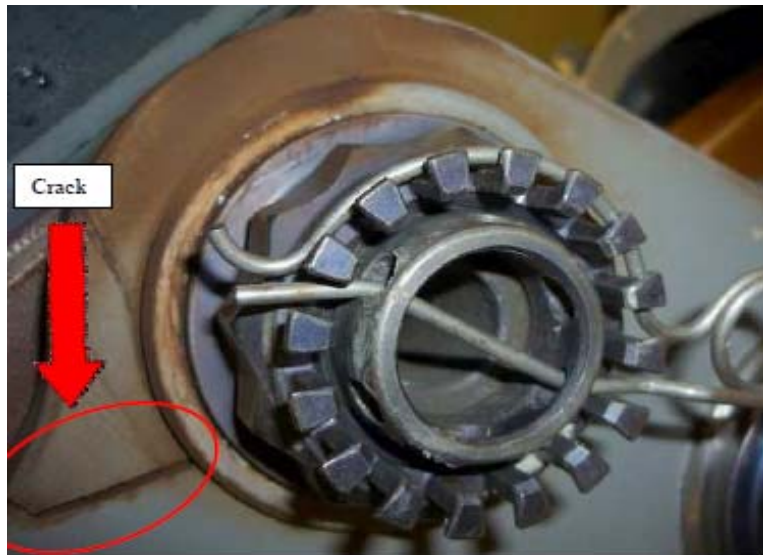


Figure 1 to Paragraph (f)(1)

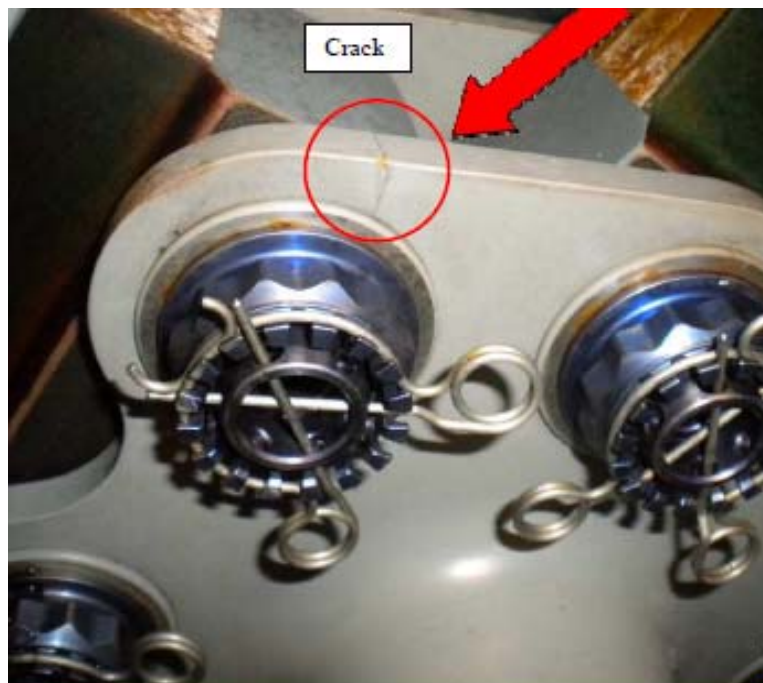


Figure 2 to Paragraph (f)(1)

(2) For MRH shafts with 400 or more hours TIS, within 50 hours TIS, and thereafter at intervals not to exceed 50 hours TIS:

(i) Remove the rotor-hub cap.

(ii) Clean the upper and lower MRH shaft flange as depicted in Figure 2 of Eurocopter Alert Service Bulletin No. EC135-62A-029, Revision 7, dated October 22, 2012, and visually inspect for a crack.

(3) If there is a crack in the upper or lower MRH shaft flange, before further flight, replace that MRH shaft with an airworthy MRH shaft. Replacing the MRH shaft with an MRH shaft having a P/N listed in the applicability of this AD does not constitute terminating action for the requirements of this AD.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(3) Any AMOC approved previously in accordance with AD No. 2012-10-53, Amendment 39-17254 (77 FR 69558, November 20, 2012), is approved as an AMOC for the corresponding requirements in paragraph (f) of this AD.

(h) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2012-0085R5, dated October 30, 2012. You may view the EASA AD in Docket No. FAA-2014-0034 on the Internet at <http://www.regulations.gov>.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6220, Main Rotor Head.

Issued in Fort Worth, Texas, on January 16, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2014-01954 Filed 01/30/2014 at 8:45 am; Publication Date: 01/31/2014]